

Evaluation of morphological operation structure elements for eggs identification in gonad ultrasound image

ABSTRACT

There are various type of radiology imaging such as ultrasound image, computed tomography (CT), magnetic resonance imaging (MRI) and plain x-rays. These imaging are widely used in medical field in term of to diagnose and treat disease. Radiology imaging also can be used in aquaculture field where ultrasound image is used to identify eggs in fish gonad. However due to the characteristic of the eggs in the gonad ultrasound image is small and different size at the same time lead to difficulties in identifying the eggs. Based on these characteristics, the morphological-based segmentation is applicable in segmenting the eggs in ultrasound image because this method is useful for describe and segment the region shape especially in the small objects.

Keyword: Radiology imaging technology; Ultrasound image; Morphological-based segmentation